

IV. REMARKS/ARGUMENTS

Prior to continued examination, Applicants submit the following Remarks.

A. Status of the Claims

Claims 11-35 are pending. Claims 1-10 have been cancelled, without prejudice. Claims 12, 13, 17, 18, 20-26, 32 and 34 are withdrawn from consideration. Claims 11, 14-16, 19, 27-31, 33 and 35 stand rejected. Applicants have amended claims 1 and 27. No new matter is introduced by these amendments, and these amendments are fully supported by the specification. Applicants respectfully request reconsideration of the rejections of these claims for at least the following reasons.

B. Election/Restriction

The Office Action has withdrawn claims 17 and 18 from consideration because they are not directed to the “one embodiment . . . that was elected.” Office Action, Page 2. The actual restriction requirement, however, was between “claims drawn to an apparatus,” and “claims drawn to a method for assembling.” See Office Action mailed February 3, 2005 at 3. Claims 17 and 18 are both dependent on independent claim 11, which claims “An apparatus for applying thin sections of a tissue sample to a receiving medium.” Therefore, the withdrawal of claims 17 and 18 from consideration is improper, and Applicants respectfully request that this be withdrawn.

C. Objection To The Specification

The specification is objected to due to a typographical error in paragraph [0055]. Applicants have amended paragraph [0055] accordingly.

D. Claim Rejections Under 35 U.S.C. § 102(b)

Claims 11, 14, 27, 29, 31 and 33 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,156,019 to McCormick. Specifically, with regard to independent claim 11 and dependent claim 14, the Office Action asserts:

McCormick discloses the same invention including a blade assembly for slicing thin section from a work piece (18), a plurality of transfer rollers sequentially arranged in tangential proximity to each other (40a, 48, and 40), a thin section on the surface of one transfer roller will be transferred to the surface of the sequentially successive transfer roller (40 Fig. 1, it is noted that item A need not be directly in contact with item B to be considered on the surface of item B. For example, if three books were stacked, the highest book is still on the surface of the lowest book via the middle book), a first sequential transfer roller is oriented in proximity to the slicing means (40a) so that a thin section sliced from the work piece will contact the surface of the first sequential transfer roller (26 contacts belt 24 which contacts roller 40a, therefore 26 contacts the surface of 40a), and a receiving medium (62) disposed in tangential proximity to a final sequential transfer roller (far right 40) so that the thin section on the surface of the final sequential roller will be transferred to the receiving medium in a substantially smooth and flat configuration (occurrence of 26 to the right of 40).

Office Action, Page 3. Applicants respectfully disagree.

In order for a claim to be anticipated by a reference, that reference must disclose each and every element of the claimed invention. *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) ("A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference."); *see also Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) ("The

identical invention must be shown in as complete detail as is contained in the . . . claim.”). Independent claim 11 recites:

An apparatus for applying thin sections of a tissue sample to a receiving medium comprising:

a blade assembly for slicing thin sections from a tissue sample;

a plurality of transfer rollers sequentially arranged in tangential proximity to each other, such that a thin section in contact with the surface of one transfer roller will be transferred to the surface of the sequentially successive transfer roller;

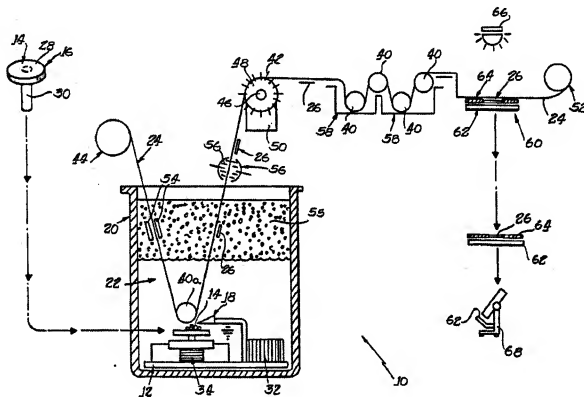
wherein a first sequential transfer roller of said plurality of transfer rollers is oriented in proximity to said blade assembly so that said thin section sliced from said tissue sample will contact the surface of said first sequential transfer roller; and

a receiving medium disposed in tangential proximity to a final sequential transfer roller of said plurality of transfer rollers so that said thin section on the surface of said final sequential transfer roller will be transferred to said receiving medium in a substantially smooth and flat configuration.

Appl’n, Claim 11 (emphasis added). Applicants previously argued that McCormick did not disclose the claimed “plurality of transfer rollers sequentially arranged in tangential proximity to each other, such that a thin section on the surface of one transfer roller will be transferred to the surface of the sequentially successive transfer roller” because they were “sprocketed wheels” that guide the movement of conveyer 24, and not in “tangential proximity to each other.” See Response Under 37 C.F.R. § 1.111 at 14-15. The Office Action has responded by arguing that the term “proximity” is defined as “The state, quality, sense or fact of being near or next.” Office Action, Page 7.¹ The Office Action, however,

¹ Applicants do not necessarily agree with the Office Action’s definition of this term.

neglected to consider the word “tangential” in the phrase “tangential proximity.” Applicants submit that one of ordinary skill in the art would understand “tangential” to mean “merely touching or slightly connected.” See Exhibit A, Webster’s II New College Dictionary. Clearly, the elements that the Office Action has alleged to be in “tangential proximity” to each other are not “merely touching or slightly connected.” This is illustrated below in McCormick’s Fig. 1:



Notably, there are additional elements illustrated between elements 40a, 48, and 40, which is further evidence that sprocketed rollers 40a, 48 and 40 are not in “tangential proximity.” For example, Fig. 1 illustrates several tissue samples 26 on the conveyor between sprocketed wheel 40a and sprocketed wheel 48, as well as radiation source 56. Between sprocketed wheel 48 and sprocketed wheel 40, one sample is illustrated. The distance between sprocketed wheels 40a, 48 and 40a prevents them from transfer a thin section in contact with the surface of one

transfer roller ... to the surface of the sequentially successive transfer roller.”
Therefore, Applicants respectfully request that this rejection be withdrawn.

The Office Action further responds that the word “on” is defined as “used to indicate position above and supported by or in contact with.” Office Action, Page 7. Based on this definition, the Office Action contends that, because McCormick’s tissue sample “is clearly above and supported by the surface of the transfer roller,” the tissue sample is “on the surface” of the sprocketed rollers. Applicants respectfully disagree.

First, Applicants do not necessarily agree with the Office Action’s definition of this term in the context of the disclosure of the present application. Nevertheless, in an effort to expedite the prosecution of the present application, Applicants have amended claim 11 to specify that “a thin section in contact with the surface of one transfer roller will be transferred to the surface of the sequentially successive transfer roller.” Clearly, McCormick’s tissue sample 26 does not contact the surfaces of any of sprocketed rollers 40a, 48, and 40.

Second, the Office Action’s argument neglects other plain language in the claim that requires the tissue sample to contact the surface of the transfer rollers. For example, claim 11 also recites:

wherein a first sequential transfer roller of said plurality of transfer rollers is oriented in proximity to said blade assembly so that said thin section sliced from said tissue sample will contact the surface of said first sequential transfer roller;

and

a receiving medium disposed in tangential proximity to a final sequential transfer roller of said plurality of transfer rollers so that said thin section on the surface of said final sequential transfer roller will be transferred to said receiving medium in a substantially smooth and flat configuration.

Appl'n, Claim 11. Therefore, for at least these reasons, Applicants respectfully request that the rejection of independent 11, and all claims dependent thereon, be withdrawn.

With regard to independent claim 27, and dependent claims 29, 31 and 33, the Office Action asserts:

McCormick discloses the same invention including a holding assembly for manipulating a work piece (16 [sic, 18]), a blade assembly for preparing a thin section from the work piece (1 8), a transfer roller mechanism (40a, 48, and 40) for transferring the thin section to a receiving medium (62), and a controller (34).

Office Action, Pages 3-4. Applicants respectfully disagree.

Applicants submit that McCormick does not disclose all elements of claim 27. Specifically, claim 27 recites:

An apparatus for automatically producing tissue slides from a tissue sample within a sample block comprising:

a holding assembly for manipulating said sample block;

a blade assembly for preparing a thin section from said sample block;

a transfer roller mechanism for transferring said thin section in contact with the surface of a transfer roller to a receiving medium; and

a controller.

Appl'n, Claim 27 (emphasis added). Although Applicants do not necessarily agree with the current rejection, in order to expedite the prosecution of the present application, Applicants have amended claim 27 to specify that the transfer roller mechanism transfers the "thin section in contact with the surface of a transfer roller to a receiving medium." As discussed with regard to claims 11 and 14, McCormick does not disclose a tissue sample in contact with the surface of a

transfer roller. Therefore, for at least these reasons, Applicants respectfully request that the rejection of independent claim 27, and all claims dependent thereon, be withdrawn.

E. Claim Rejections under 35 U.S.C. § 103(a)

1. Claim 15

Claim 15 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of U.S. Patent No. 3,286,575 to Burkhardt. Specifically, the Office Action asserts:

McCormick discloses the invention including a blade assembly for producing thin sections (18).

However, McCormick fails to disclose a first blade assembly. Burkhardt teaches a first or preliminary blade assembly (Column 1, lines 33-35). It is also old and well known in the art of manufacturing to cut a work piece down to a specific size so that the work piece fits in the next machine of the manufacturing process. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with a first or preliminary blade assembly, as taught by Burkhardt, to cut away unwanted parts of the work piece before the critical cutting takes place.

Office Action, pages 4-5.² Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

In order to establish a prima facie case of obviousness, at least three criteria must be met. First, there must be some motivation or suggestion to make the proposed combination or modification of the references. Notably, “the teaching or suggestion to make the claimed combination must be found in the prior art, and not based on the applicant’s disclosure.” MPEP 2142, discussing In re Vaeck, 947

² The Office Action presents a similar rejection with regard to claim 28. See Office Action, Page 9.

F.2d 488 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. Finally, the combined or modified references must teach or suggest all claim limitations. See MPEP § 2142 *et seq.*

Assuming arguendo that there is motivation to combine McCormick and Burkhardt, the combined references fail to disclose or suggest all claim limitations. Claim 15 is dependent on independent claim 11, respectively, and thereby incorporates all limitations of that claim and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 11, and Burkhardt does not cure these deficiencies. Therefore, for at least the reasons articulated above with respect to independent claim 11, Applicants respectfully request that this rejection be withdrawn.

2. Claim 16

Claim 16 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of U.S. Patent No. 6,006,737 to Hayashi et al. (“Hayashi”). Specifically, the Office Action asserts:

McCormick discloses the invention but fails to disclose a blade supply canister and the blade is advanced from the blade supply canister at predetermined intervals. Hayashi et al. teaches that it is old and well known in the art of stationary blade/moving workpiece saw to incorporate a blade supply canister (2) and the blade is capable of being advanced from the blade supply canister at predetermined intervals (3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with the slicing means, as taught by Hayashi et al., to provide a longer lasting blade to perform the slicing function.

Office Action, Page 5. Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

Assuming arguendo that there is motivation to combine McCormick and Hayashi, the combined references fail to disclose or suggest all claim limitations. Claim 16 is dependent on independent claim 11, and thereby incorporates all limitations of that claim and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 11, and Hayashi does not cure these deficiencies. Therefore, for at least the reasons articulated above with respect to independent claim 11, Applicants respectfully request that this rejection be withdrawn.

3. Claim 19

Claim 19 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of U.S. Patent No. 6,074,868 to Blumenfeld. Specifically, the Office Action asserts:

McCormick discloses the invention but fails to disclose a display means for displaying operating information. Blumenfeld teaches that it is old and well known in the art of machines adapted to work with slides to incorporate a display means (22b). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with a display means, as taught by Blumenfeld, to allow the productivity of the machine to be watched and corrected if need be.

Office Action, Pages 5-6. Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

Assuming arguendo that there is motivation to combine McCormick and Blumenfeld, the combined references fail to disclose or suggest all claim limitations. Claim 19 is dependent on independent claim 11, and incorporates all limitations of that claims and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 11, and Blumenfeld does not cure these deficiencies. Therefore, for at least the

reasons articulated above with respect to independent claim 11, Applicants respectfully request that this rejection be withdrawn.

4. Claim 28

Claim 28 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of Burkhardt. Specifically, the Office Action asserts:

McCormick discloses the invention but fails to disclose a preliminary blade assembly capable of removing slices from the work piece. Burkhardt teaches a first or preliminary blade assembly (Column 1, lines 33-35). It is also old and well known in the art of manufacturing to cut a work piece down to a specific size so that the work piece fits in the next machine of the manufacturing process. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with a first or preliminary blade assembly, as taught by Burkhardt, to cut away unwanted parts of the work piece before the critical cutting takes place.

Office Action, pages 6. Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

Assuming arguendo that there is motivation to combine McCormick and Burkhardt, the combined references fail to disclose or suggest all claim limitations. Claim 28 is dependent on independent claim 27, respectively, and thereby incorporate all limitations of that claims and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 27, and Burkhardt does not cure these deficiencies. Therefore, for at least the reasons articulated above with respect to independent claim 27, Applicants respectfully request that this rejection be withdrawn.

5. Claim 30

Claim 30 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of U.S. Patent No. 5,989,835 to Dunlay et al. (“Dunlay”). Specifically, the Office Action asserts:

McCormick discloses the invention including the controller determines an orientation of the sample blade with respect to the blade assembly (34). However, McCormick fails to disclose an optical imaging system for locating the tissue sample within the sample block. Dunlay et al. teaches an optical imaging , system for locating the tissue sample within the sample block (Abstract). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with an optical imaging system, as taught by Dunlay et al., to allow the user to detect best part of the work piece to work with.

Office Action, Pages 9-10. Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

Assuming arguendo that there is motivation to combine McCormick and Dunlay, the combined references fail to disclose or suggest all claim limitations. Claim 30 is dependent on independent claim 27, and incorporates all limitations of that claims and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 27, and Dunlay does not cure these deficiencies. Therefore, for at least the reasons articulated above with respect to independent claim 27, Applicants respectfully request that this rejection be withdrawn.

6. Claim 35

Claim 35 stands rejected under 35 U.S.C. § 103(a) as allegedly rendered obvious by McCormick in view of Hayashi. Specifically, the Office Action asserts:

McCormick discloses the invention but fails to disclose a blade supply canister [and] the blade is advanced from the blade supply canister at predetermined intervals. Hayashi et al. teaches that it is old and well known in the art of stationary blade/moving workpiece saw to incorporate a blade supply canister (2) and the blade is capable of being advanced from the blade supply canister at predetermined intervals (3). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided McCormick, with the slicing means, as taught by Hayashi et al., to provide a longer lasting blade to perform the slicing function.

Office Action, Page 7. Applicants respectfully disagree, as the Office Action has failed to establish a prima facie case of obviousness.

Assuming arguendo that there is motivation to combine McCormick and Hayashi, the combined references fail to disclose or suggest all claim limitations. Claim 35 is dependent on independent claim 27, and incorporates all limitations of that claims and any intervening claims. 35 U.S.C. § 112, ¶ 4. As discussed above, McCormick does not disclose all elements of independent claim 27, and Hayashi does not cure these deficiencies. Therefore, for at least the reasons articulated above with respect to independent claim 27, Applicants respectfully request that this rejection be withdrawn.

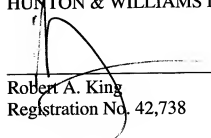
V. CONCLUSION

Applicants respectfully submit that the application is in condition for allowance. Applicants believe that no fees are necessary in connection with the filing of this document. In the event any fees are necessary, please charge such fees, including fees for any extensions of time, to the undersigned's Deposit Account No. 50-0206. Should any outstanding issues remain, the Examiner is invited to telephone the undersigned at the number listed below.

Respectfully submitted,
HUNTON & WILLIAMS LLP

Dated: December 26, 2006

By:



Robert A. King
Registration No. 42,738

Hunton & Williams LLP
1900 K Street, N.W., Suite 1200
Washington, D.C. 20006-1109
(202) 955-1500 (Telephone)
(202) 778-2201 (Facsimile)